## **TSMO**

## TRANSPORTATION SYSTEMS MANAGEMENT & OPERATIONS

Making Our System Work Better

## **TOAST 2022 - Categories & Weighting**

Weighting %	Measures	Calculated by Value Ra	Value Bango	Range		Normalized	Multiplier	Max Score
weighting %			value Kalige	Min	Max	Value	withitiplier	Wax Score
				0	1,800	10		
		Passthrough		1,800	2,600	9		
		SUM of all Bottleneck		2,600	3,800	8		
		Impact Factors where		3,800	6,250	7		
		a bottleneck impacts a TOAST corridor  Impact Factor = Avg duration (minutes) x		6,250	9,350	6		
			0-62,550+	9,350	18,450	5	2.0	20
				18,450	23,550	4		
	Bottlenecks  Bottlenecks  Orig SUM Impac the orig TO  Impa durat			23,550	29,050	3		
		Avg max length x		29,050	40,600	2		
		Number occurances		40,600	62,550	1		
30.0%		Transcr occarances		62,550		0		
30.0%		Origination Point		0	450	10	1.0	
		SUM of Bottleneck		450	600	9		
		Impact Factors where		600	800	8		
		the bottleneck		800	1,250	7		
		originated in the		1,250	1,950	6		
		TOAST corridor	0-13,650+	1,950	3,750	5		10
				3,750	4,550	4		
		Impact Factor = Avg		4,550	5,650	3		
		duration (minutes) x		5,650	7,950	2		
		Avg max length x		7,950	13,650	1		
		Number occurances		13,650		0		

Weighting %	Measures	Calculated by	Value Range	Range		Normalized	Multiplier	Max Score
weighting %				Min	Max	Value	wuitiplier	IVIAX SCOTE
		Travel Time		0%	66%	0	1.5	15
				66%	72%	1		
				72%	76%	2		
		Performance (TTP)		76%	80%	3		
		% of time speeds are within 90% of		80%	82%	4		
			0-100%	82%	85%	5		
		Reference Speed  TTP(%) = % where  TTT/RTT >= 0/9		85%	88%	6		
				88%	91%	7		
	Travel Time and Speed			91%	94%	8		
				94%	98%	9		
30.0%				98%	100%	10		
30.0%		peed  Travel Time Index (TTI)	0-2+	0.00	1.10	10	1.5	15
	•			1.10	1.20	9		
				1.20	1.30	8		
				1.30	1.40	7		
		TTI - OOth Dargantila		1.40	1.50	6		
	Trav	TTI = 80th Percentile		1.50	1.60	5		
		Travel Time (for time		1.60	1.70	4		
		of day) ÷ 50th Percentile Travel Time (all time)		1.70	1.80	3		
				1.80	1.90	2		
				1.90	2.00	1		
				2.00		0		



Weighting %	Measures	Calculated by	Value Range	Ra	nge	Normalized	Multiplian	Max Score
weighting %				Min	Max	Value	Multiplier	IVIAX SCORE
		Percent Rear End Crashes		0%	2.5%	10	1.0	10
				2.5%	7.5%	9		
				7.5%	12.5%	8		
				12.5%	17.5%	7		
		0/		17.5%	22.5%	6		
		% =	0-45%+	22.5%	30.0%	5		
		<u>Rear End Crashes</u> * Total Crashes*		30.0%	32.5%	4		
	TSMO Safety	Total Crasnes		32.5%	35.0%	3		
		*3 years crash data		35.0%	40.0%	2		
				40.0%	45.0%	1		
15.0%				45.0%		0		
15.0%	13WO Salety		ıct	0	0.2	10		
		Crash Severity Impact		0.2	0.70	9		
				0.70	1.4	8		
	Co			1.4	2.5	7		
		Crash Impact Factor = (3 year Total Number		2.5	4.2	6	0.5	5
		Crashes	0-90+	4.2	7	5		
		x V/C Ratio		7	11	4		
		x Fatal/Severe Ratio) ÷ corridor length		11	18	3		
				18	30	2		
				30	58	1		
				58		0		

Weighting %	Measures	Calculated by	Value Range	Ra	nge	Normalized Value	Multiplier	Max Score
weighting %				Min	Max			
		Incident Clearance		0	90	10		
				90	150	9		
				150	240	8		
				240	300	7		
		Sum Duration of all		300	420	6		
		Crash Clearance Times	0-3700+	420	600	5	0.75	7.5
		(minutes) X Clustering		600	780	4		
		ratio		780	1020	3		
	Traffic Incident Management			1020	1500	2		
				1500	2520	1		
15.0%				2520		0		
15.0%			0-23%+	0%	4%	10	0.75	
	J			4%	5%	9		
				5%	6%	8		
		Secondary Crashes		6%	7%	7		
				7%	8%	6		
		Ratio of Secondary		8%	10%	5		7.5
		Incidents to Total (%)		10%	11%	4		
		modents to Total (%)		11%	13%	3		
				13%	15%	2		
				15%	20%	1		
				20%		0		

Weighting %	Measures	Calculated by	Value Range	Ra	nge	Normalized Value	Multiplier	Max Score
weighting %				Min	Max			
				0	1,900	10		
				1,900	2,400	9		
				2,400	3,000	8		
				3,000	3,600	7		
		Volume per Lane		3,600	4,400	6		
		Number Vehicles per	•	4,400	5,400	5	0.5	5
		lane per mile		5,400	6,900	4		
		iune per mile		6,900	9,400	3		
	Traffic Volume Data			9,400	12,900	2		
				12,900	16,700	1		
10.0%				16,700		0		
10.0%		Data Freight Corridor	O-22%+	0%	5%	10		
				5%	6%	9		
				6%	7%	8		
				7%	8%	7		
				8%	10%	6		
		Percent Trucks (%) per		10%	11%	5	0.5	5
		mile		11%	13%	4		
		mile		13%	15%	3		
				15%	20%	2		
				20%	25%	1		
				25%		0		